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ABSTRACT

There is a need for a set of organizing principles that will provide a clear rationale for the field of program evaluation. It is contended that the concept of evaluation promoted by Ralph W. Tyler, pioneer in the field, suggests such a set of principles. Data were derived from a two-year prescriptive case study of Tyler's contributions through six decades. Methodologies included historical inquiry, interviewing, participant observation, and methodological and data triangulation. Comparative analysis was employed throughout data analysis and reporting processes. The six principles underlying Tyler's approach were: recurrence, purpose, helpfulness, credibility, positive focus, and reality. All six principles serve the primary purpose which the literature prescribes for evaluation: to help improve programs. Appendices include: the design of the study, a comparative analysis of procedures, and a linkage of assumption seven with each of the six Tyler principles. (Author/DWH)

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THE EVALUATION PRINCIPLES OF RALPH W. TYLER: RATIONALE FOR THE FIELD OF PROGRAM EVALUATION

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The Evaluation Principles of Ralph W. Tyler:
Rationale for the Field of Program Evaluation

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PRECIS

There is a need for a set of organizing principles that will provide a clear rationale for the field of program evaluation. The author contends that the concept of evaluation promoted by Ralph W. Tyler, pioneer in the field, suggests such a set of principles.

Data were derived from a two-year prescriptive case study of Tyler's contributions through six decades. Methodologies included historical inquiry, interviewing, participant observation, and methodological and data triangulation. Comparative analysis was employed throughout data analysis and reporting processes.

The author identified six principles underlying Tyler's approach: 1) Recurrence, 2) Purpose, 3) Helpfulness, 4) Credibility, 5) Positive Focus, and 6) Reality. All six serve the primary purpose which the literature prescribes for evaluation: to help improve programs.

Introduction

A primary need of the field of program evaluation is a set of organizing principles* that will provide a clear rationale for the field. This set of principles should do four things: 1) provide a clear rationale for the recurring process of evaluation and the analysis of data; 2) promote an approach which emphasizes the value of participants' contributions to the process and promotes their sense of self-efficacy; 3) facilitate the use of evaluation information for program improvement; and 4) encourage improvement in the state of the art.

This paper contends that the concept of program evaluation promoted by Ralph W. Tyler, pioneer in the field, suggests such a set of principles. This paper is based on a p scriptive case study which the author conducted from 1980-1982.**

The Need for Basic Principles

Most contributions to the literature of program evaluation have represented efforts to foster positive growth in the field. The profusion of information, ideas, and perspectives, however, has resulted in inconsistency and confusion. Conflict and confusion stem, in part, from the various shifts in emphasis on the purposes and procedures of evaluation during the brief history of the field. The variety of evaluation "models" introduced in recent years also has contributed to the confusion. Although models are frequently introduced to encourage consistency among

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*As used by the author, "principle of evaluation" is defined as: "A rule of action which consistently exercises a directing influence on one's approach to evaluation, is applicable across programs and all levels of decision making, and can be used as a guideline for how to think about evaluation."

**The design of the study is included in Appendices A and B.

practitioners, they use diverse labelling systems, reflect differing philosophies, and serve various purposes for evaluation.

Throughout the literature and across contexts within the field of program evaluation, researchers and practitioners cite the improvement of programs as the primary purpose of evaluation; the value of program evaluation lies in its contribution to this end. Without a set of associated and explicitly stated principles, however, the information, skills, and techniques represented in the literature of program evaluation lack productive direction, professional cohesion, and common sense.

As program evaluation develops into a recognized field of inquiry, it is important to look carefully at those whose efforts over the years can be most helpful in giving direction to the future of evaluation for the improvement of educational programs. Doing so will help those in the field to establish present direction, appropriately and effectively, and to incorporate "common sense" into evaluation.

The concept of program evaluation promoted by Ralph W. Tyler, a major contributor to the field for over sixty years, is significant and offers a set of principles that can provide a clear rationale for the field. Tyler's contribution makes a virtue of common sense. He considered the evaluation process to have an ongoing, inextricable relationship with decision making and program or curriculum development. The idea of helping in order to improve is the basic concept behind Tyler's approach to evaluation, and it assumes active participation in the evaluation process by the local participants in social action programs. It is this author's contention that Tyler's approach to program evaluation is significant, and

that the principles which guided him in his work can provide us with a clear rationale for the field.

Tyler's Career and His Evaluation Rationale

For six decades, Ralph Tyler has made numerous contributions to the field of program evaluation at every level and in nearly every context of education. His active professional career spanned nearly six decades, 1928-85. The milieu of his career was rich with educational controversy, innovation, and improvement. It began in an era in which the progressive education movement reached its peak and continued through several others. From his earliest teaching experiences in Nebraska through his various roles as doctoral student, university professor, administrator, and consultant, Tyler's philosophy was oriented toward "help[ing] children get educated." He had the ability to strip away the nonessentials, to expose the core of a problem, and to help professionals as well as lay people deal directly and constructively with their needs and interests.

Tyler's philosophy of evaluation developed very much with the efforts of progressive education, a philosophy which sought to extend the promise of American life to an industrialized society through education. It became a logical force in a curriculum movement which aspired to broaden the function of the school, to meet the needs of all kinds and classes of children, and to "democratize" culture. Evaluation as Tyler viewed it was an effort to implement this program by providing the tools to determine whether the proper changes were taking place. Evaluation was concerned with testing for the improvement of learning. While it did not denigrate the value of laboratory research, the concept of evaluation which Tyler followed (after Dewey's philosophy) rooted its research in the classroom setting.

When the progressives adopted "evaluation" as the method of assessment in the Eight-Year Study, they provided the primary vehicle for a large-scale demonstration of Tyler's approach to evaluation. The Eight-Year Study brought evaluation to the attention of a large ring of professionals; testers were forced to reconsider their assumptions. Tyler espoused unorthodox testing ideas. He took exception to the assumption of normal distribution of abilities and preoccupation with norms, scales, and other such units as the definitive concepts for valid measurement. The Study gave widespread publicity to some of Tyler's other unconventional ideas. First, behavior and objectives were the key evaluation constructs. Thus, the appraisal of abilities was to begin with a clear definition of the objective desired in terms of observable student behavior. Test-making, therefore, required that objectives be tested in behavioral terms. Second, because of the integrated nature of human behavior, abilities measured in isolation from one another would not be understood as well when scores on several tests and results of other observations are taken together, combined, compared, or correlated. Third, the understanding of pupil achievement could be accomplished only by measuring a comprehensive range of individual differences, some of which demanded ingenious new types of instruments instead of pencil-and-paper tests. Tyler did not confine his repertoire of techniques to objective tests but called for the use of informal procedures and devices which could produce helpful information. He encouraged a clearer recognition of the common elements in a range of evaluation methods in order to provide a basis for choosing which techniques to use in a given situation. Fourth, the process of instrument development had to give precedence to validity over reliability--not because it is more important, for both are essential to a good test, but because improvement of reliability is logically the last step in refining

an instrument after a test situation has been found which measures the behavior and not some other behavior. Thus, tests would have to sample those student behaviors which would indicate attainment of the objectives. Finally, teachers were to have a responsible role in determining the objectives of an appraisal program. Corollary to this, the improvement in teaching which comes from teachers deliberating over their purposes and methods was not considered a side effect but an integral part of the evaluation process.

Six Basic Principles

Tyler outlined the assumptions which he associated with his work (Tyler, 1942),[1] but he never defined the basic principles which guided his work in program evaluation. By studying the issues of evaluation and testing which Tyler discussed, the development of the evaluation philosophy which he held, and the basic assumptions which Tyler associated with his work, and by using the comparative analysis method (Glaser and Strauss, 1976), the author derived a set of logical constructions or workable principles (Vernazza, 1982). These evaluation principles, therefore, are operational concepts derived from a synthesis of the research data. All six principles serve the primary purpose which the literature and which Tyler define for evaluation. Thus, the underlying axiom: the purpose of evaluation is to help improve the program. The six principles include:

1. Principle of Recurrence--program evaluation is an ongoing procedure which focuses on both process and products.
2. Principle of Purpose--program evaluation focuses on developments within the context of the program's purposes/objectives.

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[1]Ralph W. Tyler, "General Statement on Evaluation," Journal of Educational Research, 1942, pp.495-497.

3. Principle of Helpfulness--everything done in the evaluation process--from appraising the original plans through assessing implementation activities and outcomes, to preparing the final report--is helpful to those who will use it.
4. Principle of Credibility--planning the evaluation and synthesizing the data into a picture of the program's dynamics have clarity of purpose and of philosophy and they "make sense" to those who will use the information.
5. Principle of Positive Focus--obtaining information about what students and others can do rather than, simply, what they cannot do demonstrates faith in people.
6. Principle of Reality--improvement and change occur slowly; recognizing and making the best use of available resources and using "we" as the byword facilitate it.

Commonsense Appeal: Significance

These straightforward, simple principles are based on the logic of common sense and assume program improvement to be the primary prupose of evaluation. By following these six principles consistently, Tyler helped those responsible for the evaluation of social action programs to identify the kinds of questions that need to be answered in order to improve programs. He directed his efforts to an approach which stimulated dialogue among clients regarding their philosophy(ies) of education as a context for decision-making about their programs.

In 1981, Tyler stated:

> [O]ne of the important questions always is "Where do you get your philosophy?" The purpose of [my approach] is not to work [with] only one philosophy of education.... It's for a variety of philosophies. .. . It says to the program planners, "Look

> at what you think. You've got to do the thinking." This is not doing the thinking for them. It [suggests a process] based on their own decision, their own philosophy, the questions they've got to deal with and the information they must collect in order to deal with them with more dependability. . . . [Y]ou must have some philosophy of your own and examine what it is you feel and go from that point.[2]

Tyler's philosophy, which developed from progressivist thought in the early decades of this century,[3] has emerged as a "dynamic, practical and eclectic approach to program evaluation . . . . It is one that has commonsense appeal" (Stufflebean & Webster, 1980).[4]

> "My role, as I see it, is to help children get better educated--not to find out things just for their own sake. Research is a good thing and I have been, from time to time, a researcher, but as an evaluator my concern is helping to improve."[5]

The Role of the Evaluator and the Basic Principles

The role which the evaluator assumes can have an effect on program improvement. How we define the role of the evaluator, therefore, is important in determining the appropriateness of a set of basic principles for the field of program evaluation.

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[2]Interview with Ralph W. Tyler, Berkeley, California, April 29, 1981.

[3]According to Huebner and MacDonald, ASCD UPDATE, 1980, 22(6), p.13, "all of the essential elements" in Tyler's philosophy emerged from "predecessor works which constitute the heritage of the field, namely: John Dewey's The Child and the Curriculum (1902) and The Sources of a Science of Education (1929); the report of the Committee on Curriculum Making of the National Society for the Study of Education led by Harold Rugg (1927); the work of H. H. Giles, S. P. McCutchen and A. N. Zechiel in their curriculum report on the Eight-Year Study (1942); Taba's "General Techniques of Curriculum Planning" (1945), and finally the orchestrated statement by Tyler (1949).

[4]Daniel Stufflebeam and William Webster, "An Analysis of Alternative Approaches to Evaluation," Educational Evaluation and Policy Analysis, May-June 1980, Vol. 2, No. 3, p. 8.

[5]Interview with Ralph W. Tyler, Menlo Park, California, August 20, 1981.

Tyler did not formally describe the role of the evaluator when he presented the six assumptions underlying his approach (Tyler, 1942). The author, however, through her research on Tyler's work, identified a seventh assumption which defines the evaluator role as Tyler viewed it. Assumption Seven states:

The role of the evaluator is three-fold:

1) To help teachers, administrators, students, and other program participants identify the questions they want answered, the information that can be obtained to answer them, and how to go about getting it;
2) To compare ideas and plans that are proposed or are in mind with the realities of what is there; and
3) To guide the development of methods for interpreting the results intelligently and for helping teachers, administrators, program directors, and other consumers use them most helpfully.

The seventh assumption reflects three key emphases in the interpretation which Tyler gave to the evaluator role:

Emphasis #1: solving problems through the strengths of people;

Emphasis #2: getting checks, continually, on the realities; and

Emphasis #3: helping the clients to effect program improvement.

These emphases are essential to the philosophical framework which guided Tyler in his role as program evaluator. By seeing how the seventh assumption is linked with each of Tyler's six evaluation principles, one may understand better the philosophy which Tyler followed:*

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* These linkages are included in Appendix C.

Emphasis #1: Solving Problems Through the Strengths of People

Tyler's belief in solving problems through the strengths of people is an important aspect of his assumption about the evaluator's role. Because Tyler believed that "[i]n actuality [the program] is what exists in the heads of [those involved]," his approach to the evaluator's role emphasized the importance of developing the evaluation guidelines with those who will be using the evaluation results. Working with program planners for nearly sixty years served to strengthen Tyler's conviction that the users of the program (or curriculum) and evaluation information must be involved in its formation. "How did you really get these objectives?" is the question to which Tyler returned with his clients. He wanted to help them maintain their focus on their purpose for evaluation.

> "My role is to help people work out their own philosophies, . . . to help people get the things done that they want done, and to help them understand more thoroughly where they're going."[6]

Always it was the clients' purposes which he helped them to find and to formulate. He was convinced that the efforts of those involved in the program could mitigate a problem; that with a little help in seeing what is possible, they would come up with solutions, that it was always possible to improve things.

Emphasis #2: Getting Checks, Continually, on the Realities

The second key emphasis in Tyler's interpretation of the evaluator role is getting continual checks on the realities of the program. If professional evaluators assume this is an essential element of the process,

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[6]Ralph W. Tyler, quoted in Kevin Ryan, John Johnston, Katherine Newman, "An Interrview with Ralph Tyler," Phi Delta Kappan (March 1977) p. 547.

then, said Tyler, "evaluation begins when we are planning an educational program and it is useful in checking on implementation."[7]

"Program realities" is a concept that refers to more than the amount of progress being made toward achieving or realizing the program objectives. "Program realities" includes answers to questions raised in the planning process. Such questions include: "Is this possible? Are these things important? Is this the way to set up learning experiences? Has this been tried before? What is this going to cost? Have we tried to devise plans that are in harmony with evidence--at least are we sure there is no evidence to indicate that this is bad and unlikely to succeed?"[8]

In addition to checking on "realities" during the planning stage, assessing the "realities of the program" refers to a monitoring process during implementation aimed at being "sure that what you plan is either going on or, if not, whether there are reasons to indicate that the changes that have been made are better than what was originally planned".[9] In other words, there are reasons for proposing changes. To compare proposed ideas and plans with the "realities" of what is there, then, also includes such questions as these: "What is really going on? What is the program? Does what is being undertaken need improving before proceeding further?"[10] This is very much like the view of formative evaluation: as one proceeds one checks to see what is going on in order to revise or

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[7]G.L. Carter (Ed.), "Facilitating Learning with Adults: What Ralph Tyler Says," (Wisconsin University, Madison University Extension, 1974), ED 132289, p. 48.

[8]Ralph W. Tyler, In Carter, 1974:46

[9]Ibid., p. 47.

[10]Ibid., p. 48.

modify the program if it seems that results are ineffective. Of course, such formative evaluation "is also needed after changes are made to ascertain whether the revisions have corrected the flaws and inadequacies."[11]

Although the responsibility for making the decisions about program purpose(s) rests with the participants, it is the evaluator's responsibility to identify the appropriate means for monitoring and assessing them. The validity of a device for assessing a program's chosen purposes determines its "appropriateness." The evaluator identifies the best and most appropriate ways possible within the realities of the situation to gather the information of interest--that requested by the program participants.

Emphasis #3: Helping the Clients to Effect Program Improvement

The third emphasis of the assumption which defines the evaluator role as Tyler viewed it is "helping the clients to effect program improvement." This notion of helpfulness is fundamental to Tyler's interpretation of the evaluator role:

> I'm not interested in showing [deficits]. In fact, if [something in a program] is not very good, my concern is figuring out how to help them see, step-by-step, some of the difficulties and what they can do about it, rather than just criticize it. . . . The concern is, ultimately, to improve and I try to ask myself every step, "Will this help get that program better?" "Will they understand?" "If they don't understand, will this intermediate step be necessary?" . . . . In my own thinking, the question that always guides all the way along is "How is this going to help improve education?"[12]

Tyler's commitment was to helping those involved in the program to bring about, in positive ways, the changes they desire. An evaluation skill

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[11]Ralph W. Tyler, "A Brief Overview of Program Evaluation," The Journal of Cooperative Education, Vol. 16, No. 3 (Summer 1980): 10.

[12]Interview with Ralph W. Tyler, Menlo Park, California, August 20, 1981.

which Tyler considered essential to the program participants' role is that of making judgments and decisions about the information gathered during the evaluation process. In a 1981 interview with the author, Tyler stated:

> The evaluator is not, in my opinion, the person who makes the evaluation, but rather the person who helps to provide the evidence that others can review and ultimately use to make a judgment about merit, in terms of the purpose(s) of the program.[13]

In Spite of Popularity, Criticisms

Although Tyler's commonsense approach to program planning and evaluation has enjoyed widespread appeal, it has not been free from criticism. Most of the criticisms seem to result from the lack of clearly defined terminology in the Tyler literature about his objectives-based approach to program evaluation. For example, there are frequent misinterpretations of Tyler's use of the term "objectives." Tyler had a strong commitment to program purposes or objectives as the pivotal point for improving programs. His intent was to help clients assume an active role in and a conscious responsibility for setting the program's direction by helping them clarify their philosophy(ies) first, and using that as a "screen" for defining their program objectives.

> [I]f an educational program is to be planned and if efforts for continued improvement are to be made, it is very necessary to have some conception of the [objectives] that are being aimed at. These educational objectives become the criteria by which materials are selected, content is outlined, instructional procedures are developed and tests and examinations are prepared. All aspects of the educational program

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[13]Interview with Ralph W. Tyler, Menlo Park, California, August 20, 1981.

> are really means to accomplish basic educational purposes. Hence, if we are to study an educational program systematically and intelligently we must first be sure as to the educational objectives aimed at.[14]

Tyler interpreted and developed an "objective" as "a description of an area of behavior which will be recognized by certain behaviors that indicate the development of the behavior aimed at."[15] Frequent usage of the term by others in the field, however, reflects a different interpretation. "Objective" is frequently equated "with a highly detailed, specific behavior which is one of a myriad of similar statements describing a desired behavior or kind of knowledge for students to develop or acquire."[16]

Although the approaches Tyler had used in the earliest years of his career tended toward setting more specific objectives, he conceived of objectives as the broad purposes upon which a program is built and not as a multitudes of micro-behaviors. In an interview with this author in 1981, he commented:

> I'm often called the "Father of Behavioral Objectives," but it's not the kind of little specific objectives people somethimes think of. Behavioral objectives are at the generalization level: "Now I have a new cognitive map of these phenomena," "Now I understand the principles to guide me through the facts." This is often overlooked if you view educational behavior as little series of individual things rather than as a more general organization of application to problems.[17]

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[14]Ralph W. Tyler, Basic Principles, op. cit., p. 3.

[15]Interview with Ralph W. Tyler, Berkeley, California, April 29, 1981.

[16]Ralph W. Tyler, quoted in Edwin Kiester, Jr., "Ralph Tyler: The Educator's Educator," Change (February 1978): 32.

[17]Ibid.

Tyler maintained that objectives should be stated in the program plan at a general level, while specific ends should be used as examples and not as ends in themselves. One should aim for the highest level of generality possible.[18]

Many educators have interpreted Tyler's evaluation rationale as if it were a post facto or terminal technique, although Tyler did not practice it as such. In his 1935 article, "Evaluation: A Challenge . . ." Tyler argued that an important function of evaluation was to "appraise the behavior of students since it is change in these behaviors which is sought in education." Egon Guba (1969) suggests that this emphasis which Tyler's approach places on student behavior as the evaluation criterion is what "caused evaluation to become a post facto or terminal technique." He states that "the form of the definition contributed to the post facto image of Tyler's rationale."

It "froze evaluation as a terminal event rendering product judgments . . . [T]he definition of evaluation in congruence terms relating outcomes to objectives, while broadening the utility of evaluation considerably and providing the possibility for feedback and process data, did tend to label evaluation as a terminal process that yielded information only after the fact."[19]

This misinterpretation of Tyler's approach to program evaluation as a post facto one is even more understandable when we consider his early use of

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[18]MarthaElin Vernazza, "The Evaluation Principles of Ralph W. Tyler: Criteria for Decision Makers and Program Evaluators." Ed.D. dissertation, University of California, Berkeley, 1982, p. 113.

[19]Egon Guba, "The Failure of Educational Evaluation," in C. Weiss, Evaluating Action Programs (Boston: Allyn and Bacon, Inc. 1971), pp.255-256.

the term "evaluation" (Tyler, 1934) which seemed to suggest that "evaluation" was a "technique" for assessing program outcomes, or when we read his statement that " . . . to see whether change has taken place it is necessary to make an appraisal at an early point and other appraisals at later points . . ." (Tyler, 1936). Some critics have mistakenly translated Tyler's intent as pre-post appraisal.

In a 1981 interview with this author, Tyler suggested that another part of the problem has been misuse of the word "outcome" which "critics have associated with post or summative evaluation exclusively." Tyler's intent was to equate "outcome" with "every outcome along the way--through the process--not at the 'end' of the process."[20]

Tyler viewed his approach to program evaluation as a recurring process. He explained in 1981:

> The best published example [of my appraoch as a formative one], perhaps, is that of the Eight-Year Study where evaluation was continually being used as part of the total process to find out whether things were actually working and to improve them.[21]

To reduce the Tyler rationale to a simple ends-means and pre-post testing process is a severe abuse. This reductionist use of the Tyler approach, however, remains a problem.[22]

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[20]Interview with Ralph W. Tyler, Berkeley, California, April 29, 1981.

[21]Interview with Ralph W. Tyler, San Francisco, California, March 30, 1981.

[22]Drawn from remarks by John Goodlad regarding, "Ralph W. Tyler: Contributions to the Curriculum Field," 1981 AERA Annual Session of Society for the Study of Curriculum History, "Ralph Tyler in Retrospect," April 13, 1981, Los Angeles Hilton.

Another problem is that Tyler's rationale is often referred to in the literature as a "model." This is a misnomer. Tyler never proposed his approach as a model or suggested that it be used as one. He never offered a series of definitions for others to follow or associated a hard-and-fast set of labels with his work; he did not describe a rigid, step-by-step procedure for the evaluation of social action programs. Tyler's purpose was to provide basic guidelines for assessing programs without attempting to prescribe one specific approach for all situations. He directed his efforts in the field towards an approach which would stimulate dialogue among those involved in the process regarding their philosophy(ies) and use this as a context for decision making about their program.

Most of the criticisms of Tyler's rationale for program evaluation derive primarily from the lack of clearly defined terminology in the Tyler literature, or from assumptions based on Tyler's earliest usage of the term "evaluation" (Tyler, 1934). There is a major difference between the rationale in use by Tyler and the rationale as a printed statement.* With his rationale as a logic-in-use, Tyler was able to respond to the dynamics of a situation by choosing appropriate actions. The rationale as reconstructed logic suffers because the dynamics of the situation are missing.

Tyler developed his rationale as one approach to evaluation for the purpose of improving programs. According to Tyler, differences in viewpoint, such as those presented here, derive largely from emphases or

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*Abraham Kaplan describes this process when he discusses the logic-in-use and the reconstructed logic in The Conduct of Inquiry: Methodology for Behavioral Sciences (San Francisco: Chandler Publishing Co., 1964), pp. 5-11.

different purposes and types of evaluative activity. In a 1981 interview he stated:

> People criticize because they have a different purpose for evaluation in mind. [My] rationale is guided by a basic purpose which is to help people responsible for educational programs to make them as good as possible--to <u>improve</u> them.[23]

The criticisms themselves illustrate that Tyler's work in evaluation is a major contribution to the field. He crisscrossed a multitude of educational contexts and spanned all levels of decision-making in the field with a commitment to helping those responsible for improving educational programs do so through intelligent evaluation. Much of the appeal of his approach lies in its commonsense logic. The basic principles which he followed and the assumptions upon which they are based clearly reflect this logic.

<u>Conclusion</u>:

The dynamics and commonsense logic of the seven assumptions and the six evaluation principles derived from the work of Ralph W. Tyler are "power tools" for professionals in the field in two important contexts. First, they suggest a comprehensive rationale for the role of evaluation in the improvement of social action programs.

The assumptions clarify the possibility of a wide range of evaluation techniques, suggest the collaborative responsibility of those participating in a program, and define the role of the program evaluator.

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[23]Interview with Ralph W. Tyler, Menlo Park, California, August 20, 1981.

The principles follow an underlying axiom that ties purpose to program improvement. They enable one to predict the appropriateness of utilizing various methods or approaches in program evaluation. In brief, the Tylerian principles suggest a rationale for conducting program evaluations so as to promote program improvement, with credibility, in a practical, hands-on fashion.

The second important context in which the Tyler assumptions and principles are "power tools" for the field is as a set of organizers. The Tyler principles offer the opportunity to unite and empower the field through their use as process criteria in key professional contexts. Such contexts could include: the practices of professional evaluators, graduate degree programs in evaluation; public and private agencies' inhouse training programs delivered by evaluation consultants in the field; program evaluation; handbooks for program administrators and local program participants; and reviews of professional books on program evaluation.

There is professional power available in the Tyler evaluation principles and assumptions. The intentions for the process are clear; the language is simple and usable; and the aim is for people to understand the ideas within their own frames of reference. The approach to evaluation synthesizes and articulates important aspects of the evaluation process in ways that are helpful--in ways that "make sense" to clients.

The Tyler assumptions and principles offer basic guidelines for the credibility of evaluation as a field of professional inquiry with a common commitment to program improvement. At no time during the growth of the field have evaluators needed such a set of principles more. The extent to which we select our methods and make decisions in the field based upon

this set of ideas will determine the cogency of this power, or efficacy in helping clients to improve programs, and the credibility which the field will achieve.

APPENDIX A

Design of the Study

Research Questions

The study had four objectives. Each suggests a researchable question:

Objective	Researchable Question
1. To throw light on the issues and problems in evaluation and testing as Tyler viewed them.	1. What issues and problems related to evaluation and testing did Tyler identify?
2. To describe the development of Tyler's philosophy of evaluation.	2. What is the philosophy of evaluation which Tyler held and how did it develop?
3. To derive the basic evaluation principles which underlie Tyler's work.	3. What are the recurring principles Tyler followed in his approach to program evaluation?
4. To suggest specific guidelines for those responsible at the local level for the evaluation of social action programs.	4. How may those responsible at the local level for the evaluation of social action programs use Tyler's evaluation principles to improve the planning and implementation of their evaluation of social action programs?

The process of getting at more dependable bases for answering the questions was not a linear one. It was an interrelated process wherein the "mind of the researcher shuttled back and forth between and among the data (indicators)"* listed below:

- professional activities Tyler referred to in his literature, during interviews, and in presentations;
- issues/concerns Tyler raised consistently in his literature, during interviews, and in formal presentations;
- themes, principles, language and behaviors Tyler consistently expressed and exhibited;
- terminology and definitions Tyler used consistently through time and across contexts;
- assumptions Tyler stated as underlying his evaluation rationale;

*Quoted from a conversation between Ralph Tyler and the researcher on March 3, 1981 in flight between Boston, Mass. and Chicago, Ill.

- purposes which Tyler identified for evaluation and methodologies he proposed and/or used to address these purposes;
- reports of methods Tyler used and the results achieved in program planning, implementation, and evaluation projects/tasks;
- views of Tyler and others regarding current issues and problems relating to the evaluation of social action programs; and
- views Tyler and others expressed regarding the problems facing schools in the nineteen-eighties.

Research Methods

This was a prescriptive case study. In addition to deriving the principles Tyler used in the evaluation of educational programs, a primary purpose was to suggest specific guidelines for the evaluation of social action programs. Research methodologies used included historical inquiry (Brickman, 1949; Barzun, 1970), participant observation and qualitative analysis (Webb, 1966; Sieber, 1972; Schatzman and Strauss, 1973; Glaser and Strauss, 1976; Denzin, 1978; Patton, 1980). Both methodological triangulation (Webb, 1966; Sieber, 1973; Denzin, 1978; Patton, 1980) and data triangulation (Denzin, 1978; Patton, 1980) were used in this study.

Methodological Triangulation

The approach to methodological triangulation which the researcher used follows the definition suggested by Webb, Sieber, Denzin, and Patton: that methodological triangulation is the use of multiple methods to study a single problem or program. In this study the researcher compiled descriptive information about Tyler's approach to evaluation by conducting focused and open-ended recorded interviews with Tyler during a period of sixteen months, conducting participant observations of Tyler's work, listening to audio and video tapes of his presentations, reading

extensively across all contexts of Tyler's writings which relate to evaluation, and examining secondary sources related to Tyler's work in the field.

To derive the basic constructs or evaluation principles underlying Tyler's work in evaluation, the researcher used a sociological technique which Glaser and Strauss (1976) refer to as comparative analysis. They describe this approach as a logical-deductive method of extracting conceptual categories and their properties by comparing analytic units. In this study, there were five categories of data sources: recorded interviews, participant observations, audio and video tapes, Tyler's writings, and secondary sources.

In the determination of the specifics of Tyler's aproach to program evaluation, his professional contributions were the primary unit of analysis with descriptions of his work derived from the five categories of data sources named above. Once derived, the information from these perspectives was subjected to comparative analysis* in order to identify both consistencies and discrepancies.

While the study of information contributed by each source focused on low-level (individual source) categories of information, this analysis sought higher level conceptual categories that described the characteristics of the various aspects of Tyler's approach to program evaluation in order to derive his basic principles.

*The procedure followed three steps suggested by the work of Glaser and Strauss (1967). These steps are outline in Appendix B.

Data Triangulation

The approach to data triangulation followed the interpretations of Denzin and Patton. Denzin describes data triangulation as the use of a variety of data sources in a study, and Patton states that triangulating data sources means comparing and cross-checking consistency of information derived at different times and by different means within qualitative methods. For this study, it meant comparing observational data regarding Tyler with interview data he provided about himself; comparing what Tyler stated in his writings and presentations with what he said in interviews and less formal situations with the researcher; and checking for the consistency of what Tyler said and wrote about his ideas in evaluation and testing over time.

The researcher carried on most of this study using primary sources. Several secondary sources were also used. Primary sources were those produced by Tyler: his responses to interview questions, his writings on program evaluation, first-hand observations of him as teacher and consultant, and audio and video tapes for his presentations.

First-hand observations of Tyler, as teacher and consultant with professionals concerned with issues of curriculum and evaluation, were conducted in three settings:

1. The University of Massachusetts at Amherst, where Tyler was teaching an Advanced Seminar in curriculum during the Spring Semester, 1981;
2. The University of California at Berkeley, where Tyler was a guest speaker in two courses and a Faculty Colloquium during the winter and spring quarters of 1981;
3. The 1981 AERA convention held in Los Angeles, California where Tyler participated in six sessions.

The researcher also listened to several audio and video tapes of Tyler presentations made to faculty and to graduate students at the University of Massachusetts at Amherst, from 1979 through 1981. They covered curriculum and evaluation issues.

Secondary sources included journal articles describing interviews conducted with Tyler by others, references made by others to his work in curriculum and evaluation, and accounts and interpretations of American educational history from the late 19th century through the 1960s (Bobbitt, 1918, 1926; Freeman, Cremin, 1959; Butts, Cremin, 1961; Joncich, 1962; Kolesnik, 1962; Krug, 1969, 1972; and Cremin, 1962, 1976).

The researcher identified those sources most relevant to her study through the ERIC System, Dissertation Abstracts, a bibliography of Tyler's works made available by the National Foundation for the Improvement of Education, and suggestions which Tyler offered.

Constraints

In the naturalistic settings of the University of Massachusetts and the University of California, Berkeley, where the researcher conducted participant observations, it was not possible to be invisible. Therefore, the choice was primarily between interacting or attempting to remain aloof. The number of opportunities available to "shadow" Tyler were limited by both the nature and the number of professional commitments Tyler made, as well as by the financial stringencies besetting the researcher. Furthermore, all research methods carry with them an affective component. Methods are not developed and used only for logical or empirical reasons but reflect personal as well as disciplinary values.

Summary

The description of the characteristics of Tyler's approach to program evaluation and the development of his rationale which this study provides extends previous research regarding Tyler in three important ways: 1) it presents an analysis of his writings as they pertain to issues and problems of program evaluation; 2) it derives the commonsense principles which he followed in his work; and 3) it makes specific suggestions for the application of these principles in the evaluation of social action programs.

The findings are taken from data collected during Tyler interviews and participant observations of Tyler's work, from Tyler's writings and secondary source materials, and from audio and video tapes of Tyler presentations. Qualitative descriptive data serve as the primary source of information about Tyler's professional history and his contributions to the field of program evaluation. The researcher employed a comparative analysis approach throughout the data analysis. Repeated refinement, extension, and verification of findings have occurred.

APPENDIX B

Comparative Analysis

(See reference to this in Appendix A.) The procedure of comparative analysis followed these steps suggested by the work of Glaser and Strauss (1967):

1. Each data source of information regarding Tyler's work was compared with the other data sources, and suggested characteristics of Tyler's work were placed in the same or a different group of characteristics based on the configuration of information evidenced by the data sources.

2. As categorizing continued, refinements in groupings were made. New groups were added as certain characteristics (properties) appeared to be important "separators" of the Tyler approach to evaluation: his principles and his rationale. Some groups were eliminated when characteristics that had been viewed initially as separating a particular principle or rationale component from others became discounted when all other characteristics for a principle or component fell within one of the larger groups that was emerging.

3. In addition to conducting the analysis outlined above, the characteristics of Tyler's approach were noted for occurrence of certain aspects which appeared to distinguish among various patterns in Tyler's work. This analysis served as a means of checking further the conceptual categories and properties that had emerged from both the initial analysis of each source of information and the comparative analysis among sources.

APPENDIX C

Linkage of Assumption Seven with Each of the Six Tyler Principles

ONE: Principle of Recurrence -- The program evaluator is available as a helpful resource to decision makers and other local consumers on an on-going basis; collects and reviews data of a formative and summative nature; and continually helps consumers to understand and use evaluation findings.

TWO: Principle of Purpose -- The program evaluator serves the consumers by beginning his work with them where they are and within the context of the purposes they have defined.

THREE: Principle of Helpfulness -- The program evaluator helps consumers identify the questions they want answered, the information for answering them, the ways to participate in gathering the information, and how to interpret and use the findings.

FOUR: Principle of Credibility -- The program evaluator uses honest and coherent means for participating in the evaluation and synthesizing the data; he demonstrates knowledge and skill for dealing with consumers' evaluation questions, and communicates information to clients in ways that "make sense" to them.

FIVE: Principle of Positive Focus -- The program evaluator seeks information about what people can do.

SIX: Principle of Reality -- The program evaluator does not look for "instant" program improvements but understands that the process of improvement occurs slowly; he helps consumers identify the best use of

their resources and participates in a symbiotic relationship with his clients.

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